

ABSTRACT OF THE DISCLOSURE

A compact, self contained, heat dissipative, brushless motor assembly which has a stator fixedly mounted onto a hub. Located about the stator is a rotor with a shaft being connected to the rotor which is conducted through a center hole formed within the hub. A heat sink is attached to the hub. A controller is mounted on the heat sink with some of the heat generated by the controller to be dissipated by the heat sink. Rotation of the rotor causes rotation of a shaft which passes through the center through hole with this shaft to be optionally connectable to a planetary gear system. The planetary gear system is to be mounted within an alcove formed within the heat sink. The rotor includes a cover which includes a series of venting holes. The motor assembly is to be enclosed by a casing. Heat from the venting holes is to be conducted into the ambient through the casing.